



# **Study of Navy Enlistment Incentive Strategies**

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# Background



- Recently completed study for N13/CNRC
  - Effectiveness of College Loan Repayment Program (LRP)
  - Cross-rating effects of EBs
  - Examine incentive options for experimentation

# Loan Repayment



## Program

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- Federal loans only
- Can't reap MGIB benefits during first enlistment, but must pay up front
- Before analysis:
  - Navy prohibited regular EB for LRP recipients, Army did not (for 58 critical MOSs)
  - Recipients could receive College Kicker
  - Yearly funding of \$100K with \$10K cap
- Army was funded at \$44M, capped at \$65K
- DoD gave Navy latitude to set cap

# **The loan market is large and growing**

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- Real cost of tuition has increased 40% for public, and 33% for private colleges in the last ten years
- Federal loans account for 50% of all aid
- Average Federal loan increased 50% between 1989 and 1995
- 86% of Federal loans are Stafford, 11% PLUS, 3% Perkins

# PLUS loans are



## different

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- *Parent* Loans for Undergraduate Students
  - Increasing function of family income
- Difficult to measure benefit to *recruit or Navy*
- No cap – depends on cost of attendance
  - 12% of parents, at an average debt of \$15.8K
- Requires further study

# Findings



	Priority ratings		Nonpriority ratings	
Type of incentive	Break even loan	% of college market	Break even loan	% of college market
EB alone	\$10K-13K	9%	\$1	44%
EB&MGIB	\$19K-22K	3%	\$11K	13%

# Summary of Results

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- For the recruit:
  - LRP is not a good deal for the majority considering critical ratings or MGIB
  - Great deal for those with large debt - not interested/qualified for high tech ratings or MGIB
    - Could cost as much as \$65K
- For the Navy:
  - When LRP is a good deal for recruit, Navy is paying a premium for those with a loan
  - Is it better to pay one recruit with loans \$60K or 3 recruits without loans \$20K?

# Issues



- Why pay premium for those with loans?
  - Productivity differentials-attrition, performance, discipline
  - Competition with Army and Air Force
- What is the propensity of those with loans?
  - Low income and minorities have higher propensity, more unmanageable debt
- What is the right cap?
- LRP and EB kicker:
  - What is the right wage differential for both degree and rating?



# Epilogue



- **Our recommendations**

- Continue to restrict to priority ratings
- Offer LRP + College Kicker *or* EB – not both
- Set cap at \$65K and exclude PLUS loans *or* set cap at \$20K and include PLUS
- Consider setting EB kicker equal to a proportion of regular EB

- **CNRCs changes**



- Offering LRP + College Kicker + EB
- Cap set at \$65K and PLUS loans are included

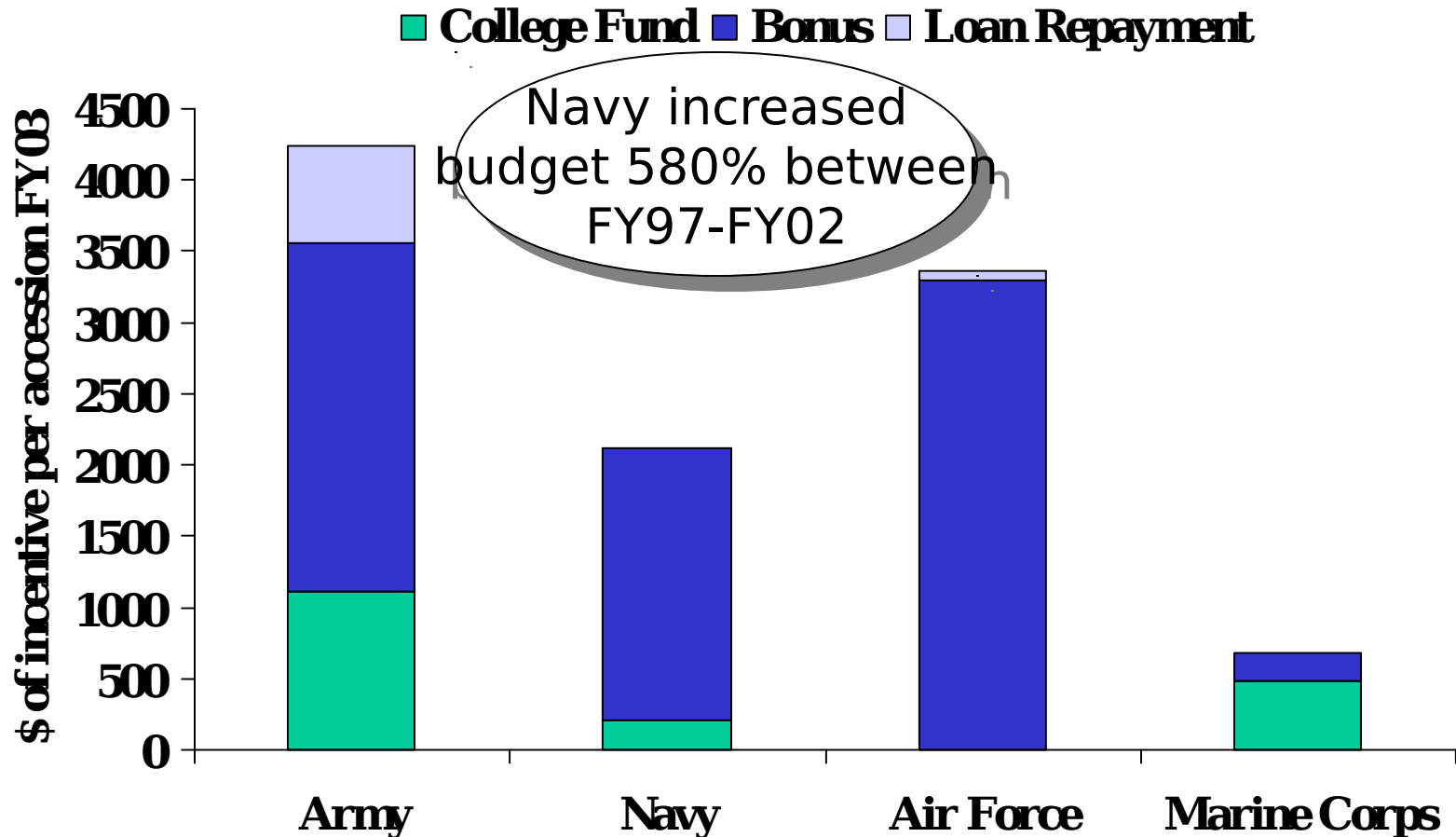
# Cross-rating Effects of

## ~~EBS: Background~~

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- Role of incentives
  - Market expansion
  - Skill channeling
  - Season channeling
  - Longer enlistments
  - Attrition/Retention
- Ultimate choice is intersection of
  - Recruit desires/qualifications
  - Navy's needs

# Navy is Outspent by Army and Air Force



# Findings of Other

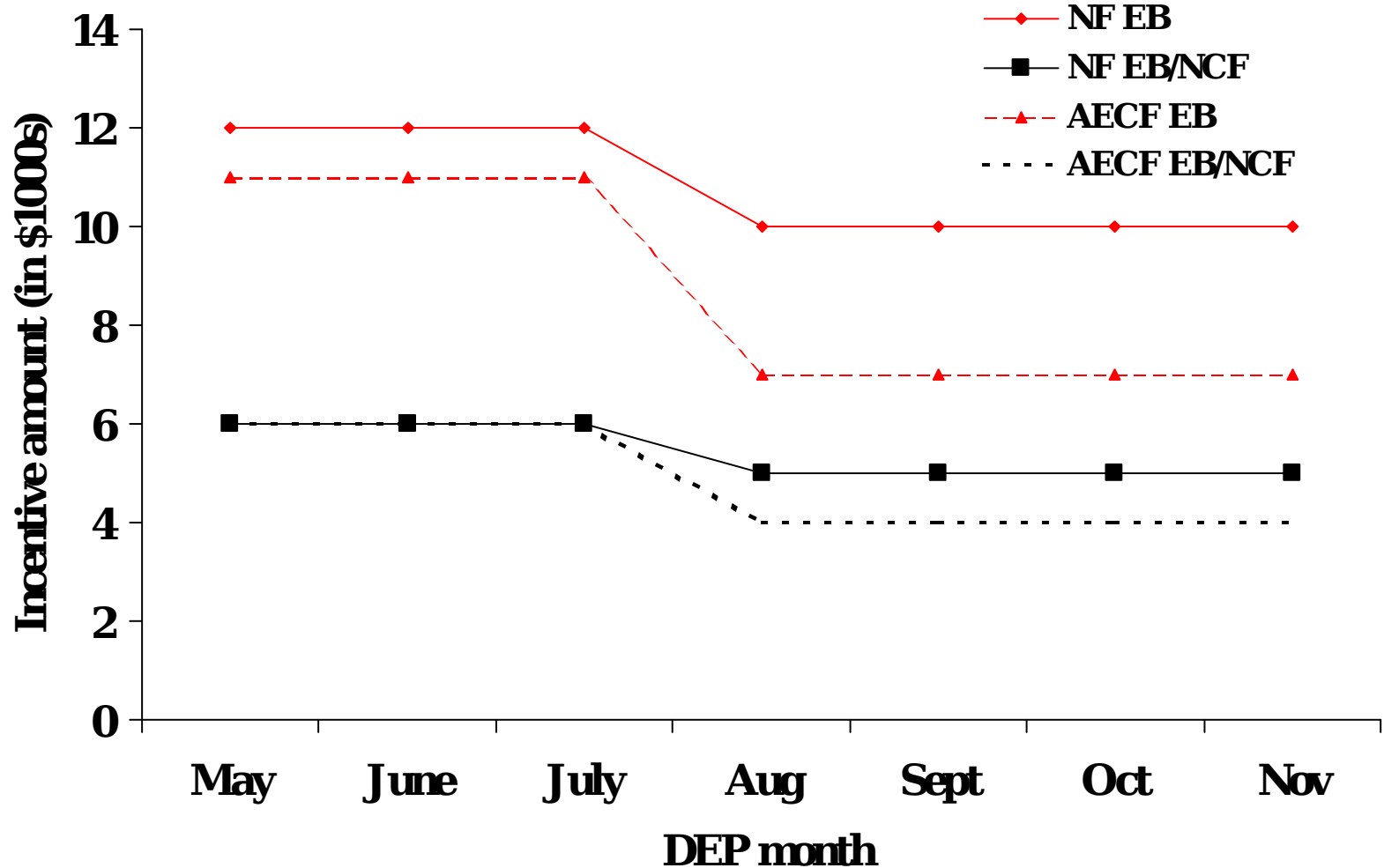


## Studies

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- RAND experiments in early 1980s
  - Bonuses were found to be effective in expanding market, skill channeling, and lengthening term of enlistment
- More recent studies of market expansion using non-experimental data
  - 1999 RAND study found troubling results for the Navy
    - Recruiter pay and unemployment had perverse effects
    - Recommended experiments to overcome data issues
  - 2001 study by Warner et al failed to find statistically significant effects for Navy
    - Study is being updated with data after 1997
    - Data issues are still serious

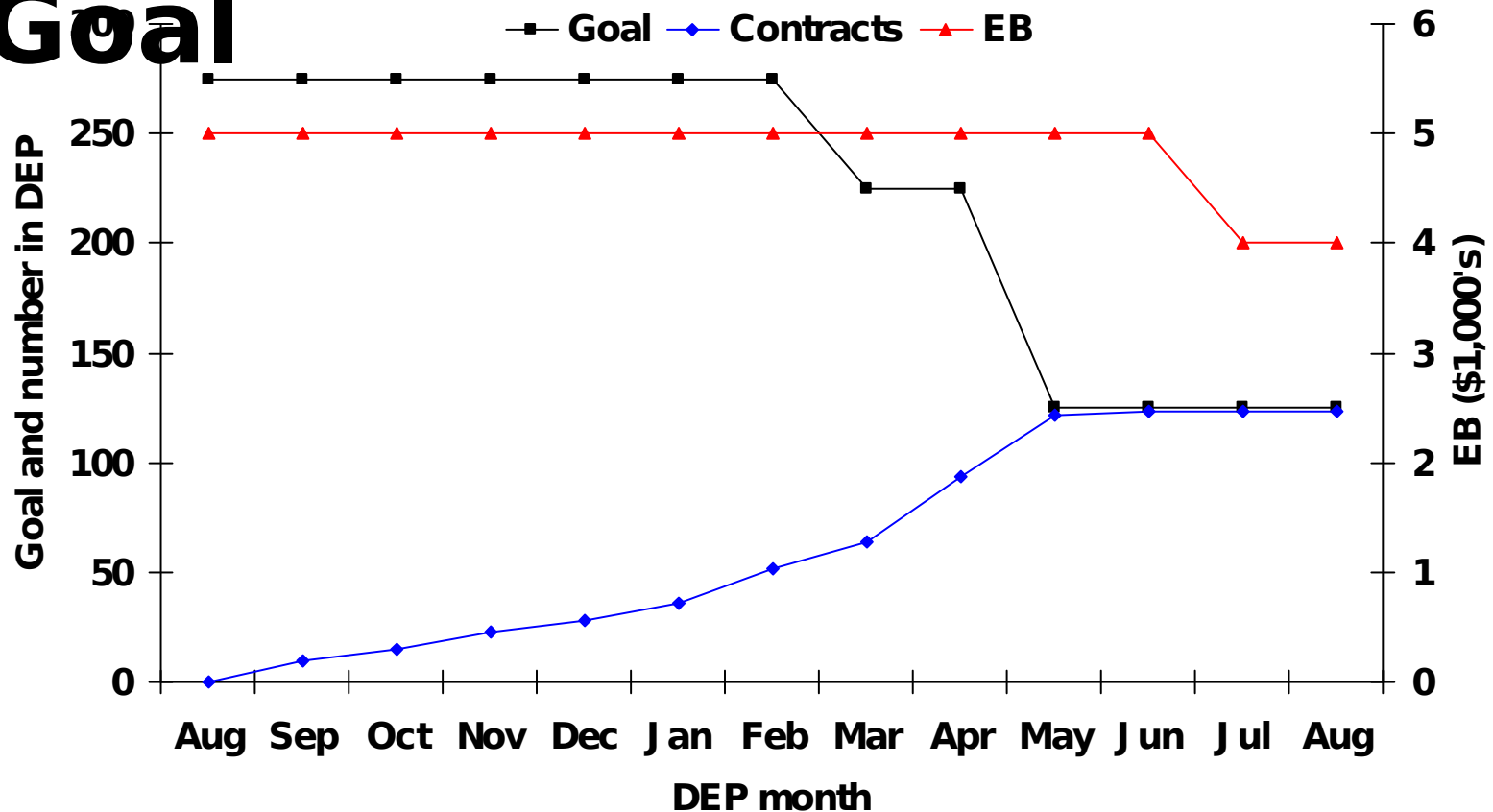
# Value of Incentives are Collin



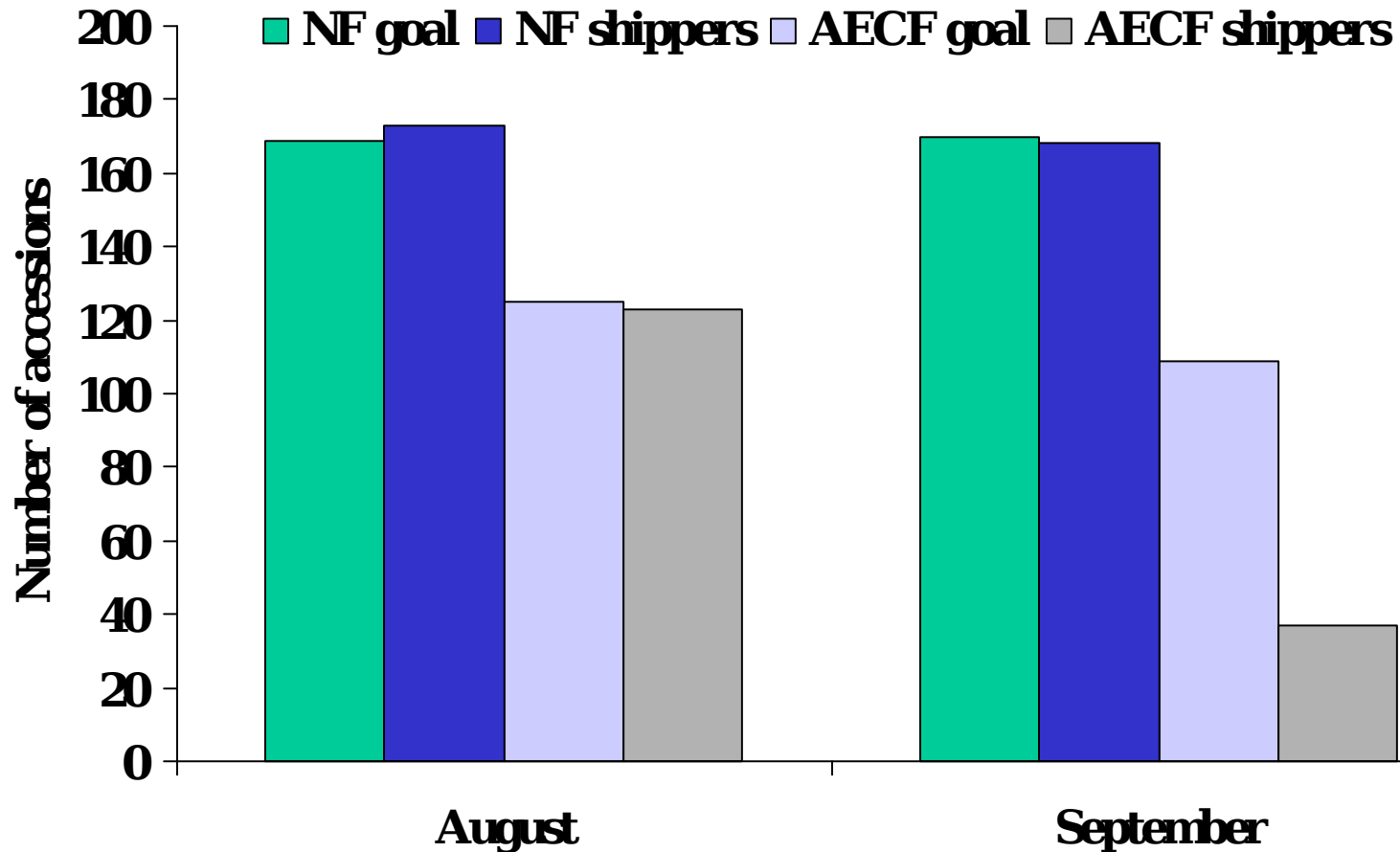
# Reciprocal Causation

## ~~Between Incentives and~~

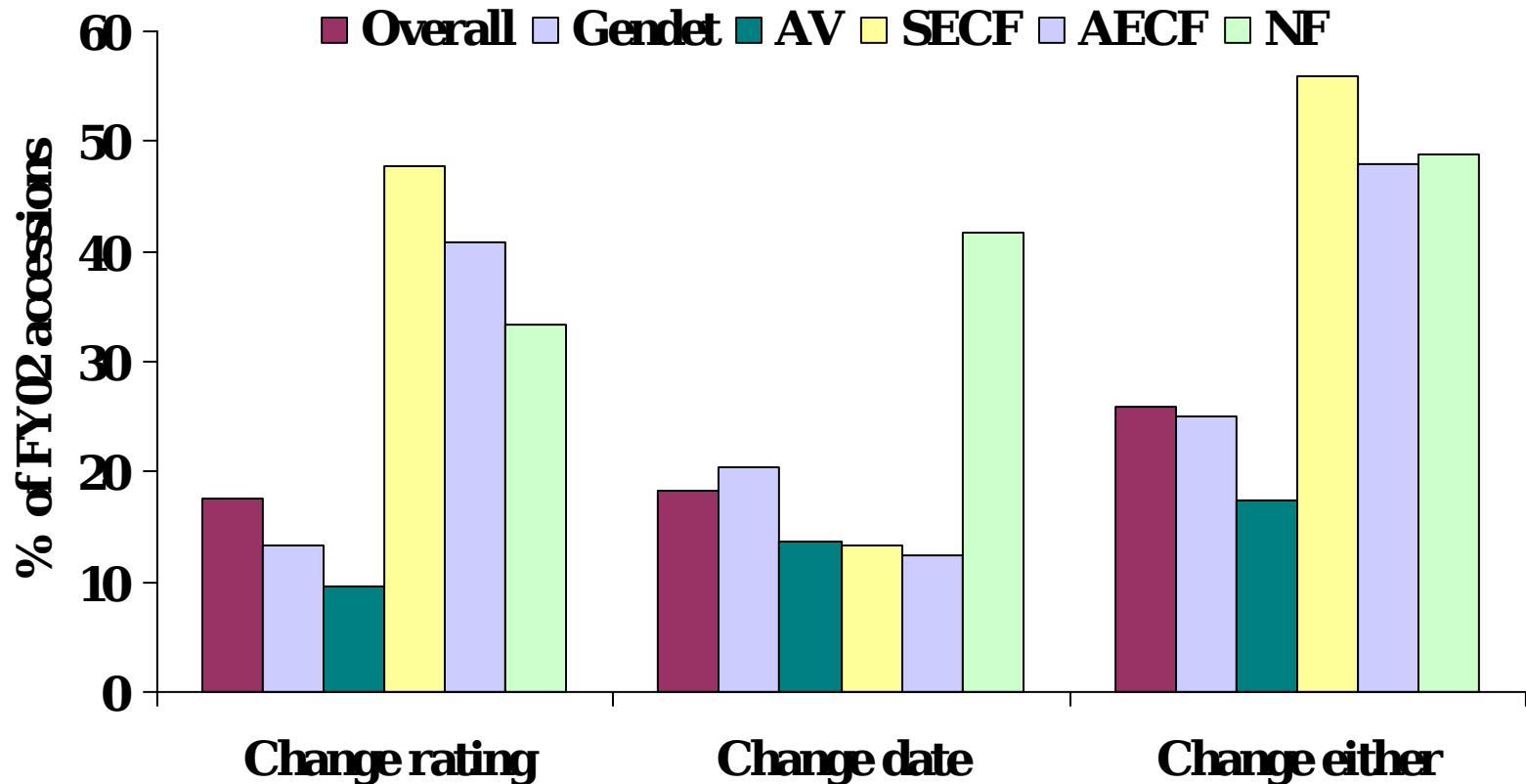
## Goal



# Unofficial Goals Are Unknown



# Why Are DEPers Willing to Switch?





# Too Many Unknowns For

## ~~Accurate Analysis~~

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- We do not know what was offered
  - Rating, ship dates, incentives
  - Knowing classifier's screens does not give full information
- It appears offers are a function of goals and priorities that can vary daily and by NRD – and even by classifier
- Incentives are not independent of rating choice
- DEPers may switch rating or ship date due to some unmeasurable and unknown negotiation
- Unofficial goals are not known
- Quotas are set for EBs
  - Classifier may request additional incentive if quota is met
  - Why are quotas not equal to goal?

# Future Work



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- No recent study has found market expansion or skill channeling effect of EBs in the Navy
- Any study with only currently available data will have same estimation problems
- Experiments and conjoint are necessary to determine both recruit preferences and classifier process
  - Classifier study is ongoing
  - We have proposed cost effective experiments

# Recommendations



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- Document all ratings, ship dates, and incentives discussed with each DEPer
  - Formulate set of priorities and guidelines for incentives and classification process
  - Urge DoD to look at cross-service effects of incentives